## ENVIRON



February 28, 2003

Mr. Matthew Ohl U.S. EPA, HSRW-6J 77 West Jackson Blvd. Chicago, IL 60604-3590

Re:

Enviro-Chem Superfund Site

Zionsville, Indiana

Dear Mr. Ohl:

Please find enclosed proposed Attachment Z-1 to Revised Exhibit A. This document is based on a combination of the *Revised Work Plan for Augmentation of SVE System* originally submitted to the U.S.EPA and IDEM in July of 2002, U.S.EPA and IDEM comments provided during meetings held on July 9, 2002, September 25, 2002 and November 21, 2002, as well as the comments provided in your July 26, 2002 and September 23, 2002 e-mails. Attachment 1 to this submission provides a reconciliation of U.S.EPA comments to Attachment Z-1 to revised Exhibit A.

Matt, once again, we appreciate the comments provided by you and your colleagues. If you have any questions or comments on Attachment Z-1, please do not hesitate to give me a call.

Sincerely,

**ENVIRON International Corporation** 

Roy O. Ball, Ph.D., P.E.

Senior Vice President

ROB:als

cc: Mr. Thomas Krueger, Esq. – U.S.EPA

Mr. Michael Habeck – IDEM

Mr. Tim Harrison - CH2M Hill

Mr. Allen Erickson – CH2M Hill

Mr. Norman Bernstein, Esq. – Trustee

## Attachment 1 Reconciliation of Comments

The following provides reconciliation of the comments received from U.S.EPA and IDEM. In addition, changes in terminology have been made to provide consistency with Revised Exhibit A.

- 1. The vapor samples will be collected from individual trench segments and wells rather than from one combined sampling port. (July 9, 2002 comments; July 17, 2002 response to comments).
- 1. The four on-site till wells will not be abandoned until completion of the installation of the Trench System. (July 9, 2002 comments; July 17, 2002 response to comments).
- 2. An additional sand and gravel monitoring well (S-5) will be installed south of the southeast portion of the Trench System. (July 9, 2002 comments; July 17, 2002, August 21, 2002 and October 15, 2002 responses to comments).
- 3. Augmented SVE trench water, the surface water within Unnamed Ditch, and the subsurface water in the upgradient (S-1) and downgradient (S-4B and S-5) sand and gravel unit monitoring wells will be sampled semiannually during the Active Phase and the Phase I Long Term Monitoring period. (July 9, 2002 comments; July 17, 2002 and October 15, 2002 responses to comments).
- 4. A sampling event will be considered complete for a particular sampling location if water is not encountered at that location. (July 9, 2002 comments; July 17, 2002 response to comments).
- 5. The RCRA compliant cover and the permeable reactive gate system (PRGS) will be inspected annually during the Phase II Long Term Monitoring period. (July 9, 2002 comments; July 17, 2002 response to comments).
- 6. The temperature sensitive construction will not occur during the winter months and, to the extent feasible, construction of the augmented SVE trench/wells will overlap with construction of the thin barrier curtain wall. (July 9, 2002 comments; July 17, 2002 response to comments).
- 7. The PRGS will be made operational immediately following attainment of the Soil Vapor Standards. (July 26, 2002 comments, August 21, 2002 response to comments).
- 8. The Trustees agree to abandon only those wells in direct line with the proposed augmented SVE trench system prior to construction activities. (July 26, 2002 comments; August 21, 2002 response to comments).

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<sup>&</sup>lt;sup>1</sup> The wall will act as a curtain to protect from the potential for water to enter the Trench System from the exterior (herein referred to as the thin barrier wall). The details of the wall are described in Appendix C to Attachment Z-1.

9. The existing Separate Treatment Area wells, formerly known as the Hot Spot area wells (HS-1, HS-1A, HS-2, IW-5) will be abandoned only after the proposed Separate Treatment Area dual-phase SVE wells have been installed and their effectiveness has been verified. (July 9, 2002 and July 26, 2002 comments; July 17, 2002 and August 21, 2002 response to comments).

· Contraction

- 10. Several monitoring wells will remain in place until the completion of the Phase I Long Term Monitoring period (i.e. T-5, T-10, S-1, S-4B, S-5). (July 26, 2002 comments; August 21, 2002 response to comments).
- 11. Sufficient piezometers will be installed to monitor hydraulic gradients in the till unit on either side of the thin barrier curtain wall and the vertical hydraulic gradient between the till unit and the sand and gravel unit on the up gradient side of the thin barrier curtain wall. (July 26, 2002 and September 23, 2002 comments; August 21, 2002 and October 15, 2002 responses to comments).
- 12. The excavated soil will be tested prior to placement on the former Southern Concrete Pad Area. Attachment Z-1 states that if the excavated soil exceeds the soil standards listed in Revised Exhibit A, Table 3-1, the soil will be treated on site or disposed of off site according to applicable U.S.EPA and IDEM regulations. (July 26, 2002 comments; August 21, 2002 response to comments).
- 13. The potential fouling of the augmented SVE collection pipe system will be considered during the detailed design phase. (July 26, 2002 comments; August 21, 2002 response to comments).
- 14. The construction of the PRGS will occur after the augmented SVE system construction. (July 26, 2002 comments; August 21, 2002 response to comments).
- 15. Damaged monitoring well S-4A will be replaced with monitoring well S-4B, which will be located approximately 50 feet to the south of S-4A. (July 26, 2002 and September 23, 2002 comments; August 21, 2002 and October 15, 2002 responses to comments).
- 16. The primary objective of the Augmented SVE System is to treat subsurface water and soil contamination in the vicinity of the augmented SVE trench and to prevent off-site migration of contaminated subsurface water. (July 26, 2002 and September 23, 2002 comments; October 15, 2002 response to comments).
- 17. The augmentation of SVE system has been divided into four distinct time periods: (1) Active Phase; (2) Phase I Long Term Monitoring; (3) Phase II Long Term Monitoring; and (4) Closure. (September 23, 2002 and November 21, 2002 comments; October 15, 2002 response to comments).